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REMARKS:

Claims 8-29 and 44 currently are pending.

The Examiner has rejected claims 8-10, 16, 18, 22, 24, 28, and 44 under 35 U.S.C. 103(a) as being unpatentable over Meilahn (U.S. Patent No. 5,762,024) in view of Effect of Artificial Upwelling on Primary Production in Toyama Bay, Japan by Iseki et al., Treatment of Atopy Skin Inflammation by Deep Sea Water by Nomura, and High Degree of Application for Deep Sea Water in Fishing Ports by Miyamato.

Moreover, all remaining claims were rejected under 35 U.S.C. 103(a) as being unpatentable over Meilahn in view of the Iseki et al., Nomura, and Miyamato references above and further in view of either: Mougin (U.S. Patent No. 4,166,363) (claims 11-13); O'Hare (U.S. Patent No. 5,669,330) (claim 14); Mougin and O'Hare (claims 15, 17, and 19); Puncochar (U.S. Patent No. 3,571,819)(claim 20); Mougin, O'Hare, and Puncochar (claims 21,23, and 25); Atwell (U.S. Patent No. 4,536,257)(claim 26); or Mougin, O'Hare, Puncochar, and Atwell (claims 27 and 29).

In response, the applicant respectfully submits that the "pool" of Meilahn is really a tank "for growing aquatic animals" (see column 1, lines 5-6). Meilahn does not describe or suggest a swimming pool. As amended above, all claims of the present invention now are limited to a "swimming pool" that substantially excludes "aquatic animals" to clarify this distinction.

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Moreover, Iseki et al. do not describe or suggest a swimming pool. Instead, this reference only discloses that deep seawater is artificially "upwelled" and mixed with surface water to determine effects on the biological productivity of marine ecosystems. In contrast, all claims of the present invention, as amended, now recite that surface sea water is substantially excluded from the swimming pool structure to make clear that mixing of surface water with deep-sea water does not occur as this would defeat the purpose of having a deep-sea water swimming pool.

Furthermore, Nomura does not describe or suggest treating atopy skin inflammation in a swimming pool. Nomura describes only the atopy skin inflammation treatment using deep-sea water that "is kept in the refrigerator for 1 month," whereby "[T]he patient is soaked in the deep sea water" were he "continues to bath...and wash with soap" (p. 10 of translated document provided by the Examiner). Clearly, providing a structure for soaping-up and treating skin diseases is not a normal use of a swimming pool. Moreover, a swimming pool does not contain water that has been refrigerated for a month. Actually, it is unclear from the Nomura reference whether the patients are soaking in deep-sea water or simply having it applied to their skin as the figures seem to suggest. Finally, one skilled in the art of swimming pool design and construction would have no motivation to look to medical literature to solve swimming pool-related problems.

Miyamoto also does not describe or suggest a swimming pool. Miyamoto discloses only a hatchery pool used to raise fish. As such, Miyamoto's pool is adapted for raising fish by including heating and cooling equipment (see pp. 9-10 of translated document provided by the Examiner) to keep the water temperature from getting to high or too low for the fish. The applicant is not aware of any swimming pool that contains such specialized equipment for both

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heating and cooling, nor would refrigerating swimming pool water be practical as large amounts of electricity would be consumed. Moreover, one skilled in the art of swimming pool design and construction would have no motivation to look to fish hatchery literature to solve swimming pool-related problems, especially given that the present claims have been amended to substantially exclude aquatic animals from the swimming pool structure of the invention.

In addition, O'Hare does not describe or suggest a swimming pool. Appendage members 17 of O'Hare's invention are described on lines 40-43 in column 3 as "[A]a plurality of cylindrical appendage members 17, fabricated of material similar to the horizontal member 11, extend downwardly from the horizontal member 11, at random angles, for an approximate length of 1 meter." On the other hand, the present invention features an "extension" that is distinct from appendage members 17 of O'Hare because, as described in paragraph [0057]in the specification, "stripe-shaped extensions 10 may be provided on the bottom surface of the pool 1 to protect the pool from attacks by sea creatures." In contrast, O'Hare's appendage members are for "supporting aquatic life on [the tank] exterior."

Puncochar does disclose a swimming pool. However, the Puncochar swimming pool consists of screens that allow surface sea-water to freely diffuse in and out of the pool, and, accordingly, it is completely devoid of any suggestion to use deep-sea water as the same would instantly mix with the surface water. Nonetheless, the present claims have been amended to make it clear that surface sea-water is substantially excluded from the swimming pool structure of the invention.

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In summary, none of the Meilahn, Iseki et al., Nomua, Miyamoto, Mougin, O'Hare, or Atwell references describe or suggest a deep-sea water swimming pool that substantially excludes surface sea-water and aquatic animals. And the swimming pool of Puncochar uses, as described above, surface sea-water only. Therefore, independent claims 8 and 44 should not be obvious to one skilled in the art because there is no suggestion or motivation to combine either the deep-sea water pumping equipment used in the various aquaculture tanks or the medicinal trials of the cited art with the surface sea-water pool of Puncochar. Furthermore, all claims of the present invention substantially exclude aquatic animals and surface sea-water from the swimming pool structure.

With this background in mind, each dependent claim rejection is specifically addressed below.

Regarding claims 9-13, since none of the cited art discloses or suggests the deep-sea water swimming pool of independent claim 8 (as amended), the mooring limitations added by claims 9 and 10 also would not be disclosed or suggested as applied to a deep-sea water swimming pool. Similarly, neither claim 11 nor claim 12 nor claim 13 are obvious because none of the cited art describes or suggests the claimed deep-sea water swimming pool that includes a propulsion device.

Claims 14 and 15 have been amended to clarify that the plurality of extensions are adapted to protect the swimming pool from attacks by sea creatures. Since the appendage members of O'Hare are structured to "[support] aquatic life" on the tanks exterior (and not for avoiding attacks by sea creatures), claims 14 and 15 should not be obvious to one skilled in the art.

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Regarding claims 16-17, Meilahn does not disclose using deep-sea water. Even though Meilahn does show means for draining the sea-water (47), means for draining the deep-sea water from the swimming pool structures as claimed in claims 16 and 17 are not disclosed or suggested.

As to claims 18 and 19, the facility 56 of Meilahn is a platform or walkway for allowing an operator to walk around the top of his aquaculture tank, and is distinct from the facility for enabling fishing from a side of a swimming pool structure. Moreover, Meilahn does not describe or suggest fishing. Therefore, it would not be obvious to one skilled in the art to provide a deep-sea water swimming pool with a facility to enable fishing.

Regarding claims 20 and 21, the swimming pool of Puncochar consists of "wall screens" that allow surface sea-water to freely come in and out of the pool. This makes Puncochar's pool unusable for the purpose of providing a deep-sea water swimming pool. Also, since the deep-sea water swimming pool of the present invention substantially excludes surface sea-water, the deep-sea water swimming pool including the means for generating and mixing air bubbles of claims 20 and 21 is not obvious.

As for claims 22-25, since the deep-sea water swimming pool of claim 8 is not disclosed or suggested by the cited art, even if it is a well-known expedient in the art of power generation to use solar and wind energy to operate domestic and industrial facilities, it would not have been obvious to one skilled in swimming pool design and construction to provide the deep-sea water swimming pool as claimed in claims 22-25.

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Looking at claims 26 and 27, none of the cited art discloses or suggests a deep-sea water swimming pool as claimed herein. Therefore, including a desalination system with the deep-sea water swimming pool claimed in claims 26 and 27 would not be obvious.

As for claims 28 and 29, it would not be obvious to provide a check valve on the intake pipe because none of the cited art discloses or suggests providing a deep-sea water swimming pool as claimed.

In view of the foregoing, the applicant respectfully requests that the Examiner's rejections be reconsidered and that this case be advanced to allowance.

If there remain any outstanding issues or questions amenable to resolution by telephonic conference, the undersigned attorney would welcome and appreciate the opportunity to discuss the case at the Examiner's convenience.

No fee is believed to be due with this amendment. Should there be any unforeseen costs, please charge our Deposit Account No. 170055.

Respectfully submitted

Quarles & Brady Streich Lang, LLP

Gavin J. Milczarek-Desai

Reg. No. 45,801

(520) 770-8716 phone

(520) 770-2235 fax